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ORIGINAL ARTICLES

THE QUALIFIED NURSE.*

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The qualified nurse is a mountain of strength to the sick and suffering and an honor to a noble profession; the right hand of the doctor and a life belt to the bereaved family.

The standard of nurses' training schools in general needs to go up. Much has been accomplished in the past few years, but much remains to be done, and it is the business of the qualified nurse to do it.

The most important advancement in the standard of the medical profession was marked by the rating of medical colleges by the American Medical Association.

Today it is almost impossible for a medical college to exist that does not maintain a standard of efficiency sufficient to be rated in "A" class. This can be seen at a glance. A young man beginning his life's career cannot afford to handicap his early reputation or source of existence by exhibiting to the public a diploma from an institution rated below par. If he does, he is primarily criticized by his medical brothers and very soon the public begins to question his proper training for the practice of his profession, and such questioning always is to his detriment. This handicap to the individual will, as you can readily see, decrease the patronage of such colleges and they are forced to either raise their standards or go out of existence through lack of patronage.

When the Nurses' National Association adopts a similar method for raising the standard of the training schools throughout the country, the qualified nurse will be more easily found.

The nursing profession is growing in personal dignity and in the respect of the public every day. It has long since discarded its swaddling clothes.

The time was, not so very many years ago, when the layman hired a nurse to relieve other members of the family from arduous and often disagreeable duties, or because there was no one else to do the work. The nurse looked after the patient, took care of the house, and very often cooked the meals. She was looked upon as "hired help" and treated accordingly. However, at that time she filled the position to which she had attained. The nurse, not a great many years ago, was some young women, without even a common-school education, forced by circumstances to work for a livelihood. Her time in the training school had been put in, in scrubbing floors, bathing patients, serving food and carrying medicine about of which she knew nothing. She was taught to count pulse, take temperatures and give enemas. Beyond that the only requirement for a diploma was her services for two years. Compare this with what is required today by the best training schools.

A qualified nurse must understand the anatomy and physiology of the body; she must have a good knowledge of drugs, their action on the human body, their dosage and their intelligent administration; she must understand hygiene and prophylaxis; she must have a working knowledge of pathology and its effects on the tissues of the body; she must be familiar with physical signs and symptoms. She is no longer let by with a knowledge of how to count pulse rate; she must have an intelligent under-

*Read before the Florida State Nurses' Association, at Jacksonville, November 19, 1919.

standing of the pulse itself, its quality, tone and regularity and what changes in these mean; she must learn surgical asepsis and the conduct of surgical operations; she must be an intelligent woman with a liberal literary education in order to qualify for the training. When she walks into a house now she is looked upon and respected for her knowledge. The family takes her into the bosom of their home and lean on her for encouragement and the protection of the sick member. The doctor, at the time of his visit, receives an intelligent survey of all the symptoms occurring since his last visit and is therefore better able to diagnose the disease and more intelligently treat the patient.

This qualified nurse is the ideal of a great profession and deserves a standing in her community second to none.

Honest criticism is wholesome, providing it is constructive and not destructive. I wish to ask you young ladies gathered together here in the interest of the nursing profession in your state, how many qualified nurses are there among your numbers? I don't propose to put my head in the pillory by hazarding an opinion, but I am going to be bold enough to say that there are some who do not meet the requirements. Alright, you say, what is the remedy? Let us hear your constructive criticism. My reply is, Deal with the problem generally. You cannot do anything with the unqualified nurse already in your midst or the others of the same calibre that are coming into your state each year until you raise your standards. Give, at least, as much thought and attention to raising the nursing standard as you do to raising your pay. I have two general remedies to offer you: First and foremost, elect none but the most intelligent of your nurses to membership on your board of state examiners and do not hesitate to remove one if she is too lazy to work or too indifferent about her profession to care about its standard. Secondly, interest yourselves in the training schools in your own state. Those of you who have given this matter any thought know as well I do that all the nurses' training schools in this state are fighting an uphill battle. Young women are being accepted that cannot meet the requirements for entrance. No one realizes this more than the heads of these schools, but at present they are forced by circumstances to accept them.

Not long since a recent graduate called on me in my office and, between her anxious efforts at masticating some chewing gum, finally made me understand that she thought "it is perfectly awful to expect a girl just out of school to go clear to Tallahassee to appear before the board; there ought to be a board in the place I graduated. I don't care, though, because I am going to get married, but thought I would make a little money first. Have you any work for a nurse, etc." Is she a qualified nurse? Young ladies, even *one* of this type is too many and it is your responsibility to efface even that one or as many as there may be among you. I have lived in this state twenty years and during that period have seen enormous strides in the standard of the medical profession of the state. I was at the biggest medical training camp in this country for seven months and there I had the pleasure of seeing the Florida doctors stand second to none. Who is responsible for this? A few medical men of high ideals and inexhaustible energy. They fought, legislated, worked and spread medical propaganda until the standards went up and the average doctor in their midst had to be qualified. It took years to do this. It will take you years to get your standard on the same plane, but you can do it and only the qualified nurse is competent of doing it. A nurses' state association and a nurses' board of examiners is a big step forward, but you cannot stop there. You have to realize that the large proportion of nurses in this state are going to come from the training schools in your state. I am in a position to know that the training schools wish to raise their standard and if there are any that do not, the sooner they are pinned to the mat the better for the profession.

The world has just come out of a big struggle where all the best in the country was

given to the one thing and it was easy for the unqualified to succeed. The struggle is over and the world is readjusting itself.

The qualified nurse will come into her own and I for one want to see this state rated class "A." Do not think for one minute that I am talking to the nurse who has had all the advantages and been started out qualified.

If there are those present who are handicapped by poor training I say to you, you can learn to qualify with the best, but you cannot do this with idle hands and minds filled up with pleasure and gossip. Go to work. Some of the greatest authorities in the country are self-taught. If you are not willing to work and improve your mind, I hope the nursing standard in Florida will force you clear out of the state.

I dare to stand here and predict that the day is not many moons away when the qualified nurse is coming into her own. Just at present no general distinction is made between the qualified nurse and the false imitation. To state plainly what I mean — the qualified nurse is going to be remunerated in accordance with her qualifications, just as is done in the medical profession. All professions, as well as trades, have a standard of fees for their guidance, but the nursing profession stands alone in having one fee for all cases, all graduate nurses and all nursing. There is no more reason or sense for this state of affairs in your profession than in any other. As a matter of fact, it is one of the worst handicaps the nurse has to contend with. Ambition is the keynote of success and the two preeminent spurs to ambition are reputation and earning capacity. The road to reputation, of course, is open, but at present it is reputation without adequate remuneration, which is both unfair and unjust. The remedy for this will be found in the qualified nurse and particularly in those of this class who, by their superior intelligence and professional equipment, force a proper recognition from the world and with that recognition a proper remuneration for the knowledge they bring to their patients.

Pioneers, individuals of big brains, big souls and big bodies; martyrs, ready to sacrifice themselves for the honor and glory of their profession, furnish the necessary means to an end. These self-sacrificing individuals in the nursing profession are already at work. I may not know them and you may not recognize them, but none the less they exist. Some will never be known; others will obtain recognition only after they die; some others will enjoy more glory than they deserve, but such is the way of the world, and properly so. No great undertaking deserves to succeed without honest toil and personal sacrifice; otherwise it could not endure.

I also foresee and prophesy the "specialist" among the qualified nurses. Right here I crave your indulgence for airing my own views. A specialist, to my mind, is a man or a woman who, through long years of trial and intensive study in his or her profession as a whole, has gradually distinguished himself or herself in one particular branch of that profession, and in that way only justified the esteem and confidence of the public at large and more especially the respect of the individual members of his or her own profession. I am old-fashioned enough to believe that a college or training school or a post-graduate course of a few months can not and does not turn out a real "specialist." Some of these embryo "specialists" become real "specialists" after years, but such a "specialist" always lacks the broad vision of the individual that has labored for a time in his or her profession as a whole. Personally I would love to live in the day of the nurse "specialist." She is coming, and the real one will surely and certainly come from the ranks of the qualified nurses.

Only a part of what I feel and hope for the qualified nurse has been said. I must not encroach on your good nature, so I close this paper by saying: "All honor and glory to the qualified nurse. May she grow to her real standing in the world of professions and may the Florida qualified nurse prove to be among the pioneers and shining lights of that nursing profession."

THE TREATMENT OF ECTOPIC GESTATION.*

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It is quite generally agreed that, a diagnosis of ectopic gestation having been made, the patient should be enjoined to rest in bed, to avoid all exertions that might possibly bring about the rupture of the gestation sac; and that without delay abdominal section should be arranged for.

No such unanimity, however, exists in caring for a case after rupture has taken place. Opinion and practice is divided between immediate operation and watchful waiting for a more opportune time for the surgical intervention.

Polak believes the operation should be postponed until the patient has recovered from the shock incident to the hemorrhage following the rupture. He says, "Almost all of these patients will 'come back' with rest and morphine." They are given an initial dose of one-half grain, followed by one-fourth grain every three hours, until the respirations are reduced to from eight to twelve per minute. The following procedure is adopted in his service: (1) The patient is put in the extreme Trendelenburg position: (2) a hypodermic injection of morphine with atropine is administered: (3) the pulse is counted every quarter of an hour: (4) the blood pressure is taken until it reaches 115: (5) neither saline nor stimulants are given. With the pulse down to 120 per minute and the blood pressure up to 115, it is considered safe to operate. He states that he has yet to see a case which has not reacted and become a safe operable risk under this treatment.

Others contend for an immediate operation for all cases. Shock is assuredly no contraindication to the immediate operation, contends Ladinski. "On several occasions," he says, "I have operated when the patient was unconscious and required no anesthesia, either general or local. It is my firm belief, justified by the results obtained in the cases of extreme collapse, that, if the operation is performed with ordinary skill and rapidity, the additional shock will be so slight that it cannot be held responsible for a single death, especially if infusion or transfusion is resorted to as soon as the abdomen is opened."

Ladinski's contention for an immediate operation has much to commend it. He says that cases of ruptured ectopic gestation present such a multitudinous variety in their course and termination that it is impossible to say from the signs and symptoms in a given case whether the hemorrhage will cease or continue, or become more profuse. The presence of blood in the peritoneal cavity is an important element in the vasomotor paralysis and shock. The longer the patient is allowed to bleed, the greater is the depression and the more profound the shock; and this regardless of the amount of blood lost. Also the recuperative power of the patient after operation depends more on the duration of the hemorrhage and shock than on their intensity at the time of the operation. For these reasons, says Ladinski, he cannot subscribe to the doctrine of deferring operation and trusting to chance, the inevitable result of which is rapidly to diminish the margin of reserve strength of the patient. Nor can he see the wisdom of the rule of watching the patient with the view of postponing operation when she is improving, and operating when she grows worse. If the patient's condition improves without operation, there can be no question that she will be better off because of the operation; and to wait until the patient grows worse entails an unnecessary loss of very precious moments that may mean the possible sacrifice of life.

Each of these two plans presented has its advocates and partisan statistics. A recent report by Bongy is based on a series of cases during the past eight years.

Previous to 1911 his cases were treated without surgical interference until the patients had recovered from shock; since that time the majority of them have been operated

*Read before the Hillsboro County Medical Society, November 11, 1919.

upon as soon as possible after their admission to the hospital. A comparative study of the two series of cases shows very little difference in final results. In both series the morbidity and mortality were about the same, unless it is assumed that some of the patients who were operated upon at once would have died if left without operation. He believes it is not yet possible to state which is the better plan of treatment. On the other hand, as long as it is impossible to foretell how soon hemorrhage may prove fatal in any given case, he thinks it is proper to operate without delay in the greatest number of cases.

Technic.

In deciding on an operative procedure in ectopic gestation it is necessary to bear in mind several of its clinical classes.

I. Cases Before Rupture.

A careful survey of the operative field and surgical judgment will determine whether the tube alone shall be removed or whether it is necessary to remove the ovary also. Because of its friability in ectopic gestation very little traction should be made on the affected tube. To manipulate the parts for position it is best to grasp the ovary and not the tube. If it has been determined to remove the tube and overy, their outer and inner blood vessels must be secured, after which the wedge between the clamp is removed. The bite held in the clamps is next securely ligatured and the stumps brought together. This operative work is comparatively simple. In the removal of the tube alone matters are not quite so simple. The tubal branch of the ovarian artery and the tubal branch of the uterine artery must be carefully clamped so as not to include or interfere with the ovarian blood supply. Care must also be exercised in ligating individually the vessels of the mesosalpinx.

After the tube is removed, the ovary is suspended by suture of the infundibulopelvic ligament to the round ligament and the raw surface at the top of the broad ligament peritonealized by whipping the mesosalpinx and round ligament together. Aside from the greater technical difficulties in removing the tube alone, we must bear in mind that the danger to subsequent hemorrhage, especially at the time of the next menstruation, is greater after this procedure than after removing tube and ovary together. A diseased ovary or the absence of the ovary on the other side, however, must determine us to assume these increased difficulties and risks.

II. Cases with Repeated Moderate Intraperitoneal Hemorrhage.

This class comprises the majority of cases met with. Repeated hemorrhages with attacks of pelvic pain and marked abdominal tenderness over a variable period of time bring these patients to us. On opening the abdomen will be found free blood and clotted blood. Usually a dark, discolored peritoneum presages its presence. Frequently a mass of variable size will be found connected with the tube and ovary, manipulation of which will often cause a profuse hemorrhage. It is therefore advisable, after having determined the extent of the resection to be done, to secure the appropriate blood vessels before any attempts are made at enucleating the mass. The further technic is essentially the same as in the previous class. Blood clots should be removed, but it is not necessary to sponge up the free blood. Drainage is not only not necessary but is actually harmful because it often determines an infection. Before closing the abdomen, a quantity of normal salt solution may be poured into the abdominal cavity if a great quantity of blood has been lost.

III. Cases with Profuse Intraperitoneal Hemorrhage.

These cases, fortunately, are not very numerous, but their tragic aspect is always alarming, and their gravity at once demands a decisive plan of procedure. The two plans of treatment discussed in the beginning of this paper should be recalled and either one or the other instituted as dictated by circumstances and judgment. The techique of the

operative treatment, either immediate or later, is the same as discussed for previous classes of cases.

IV. Pelvic Hematocele and Hematoma Cases.

By a pelvic hematocele is meant a collection of blood low down in the cul-de-sac. It is shut off from the general peritoneal cavity by plastic exudate and adhesions. By a pelvic hematoma is meant a collection of blood between the layers of the broad ligament.

Cases of pelvic hematocele and hematoma should be put to bed for a week or ten days and carefully observed. Nature will very often take care of the accumulation of blood and exudate, and satisfactory progress will assure a recovery without operation.

Sometimes, however, the absorptive process haults, or evidences of active or recurring hemorrhage become manifest, or the embryo and membranes continue to grow. The result is continued and increased pelvic irritation. These cases must be operated.

What route shall we choose? With all the pain and tenderness low down in the pelvis, the evacuation of the blood by vaginal section will probably be sufficient. Abdominal section, however, should be chosen when pain and tenderness extend to the upper pelvis. When in doubt, choose the abdominal route.

Cases that are to be operated on by vaginal section should be prepared also for abdominal section, because sometimes during the vaginal manipulations an internal hemorrhage may be provoked which would be difficult to contend with from below.

SOME DIFFERENCES IN THERAPEUTIC RESPONSE BETWEEN THE CAUCASIAN AND AFRO-AMERICAN.

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When Kipling launched the phrase "The white man's burden," it was accepted as an epigram with many sides and angles. It appealed to the Caucasian practically over the entire globe, for wherever the black-skinned people come in contact with their brethren, this burden has to be borne by the latter.

In the United States, especially in the southern portion, an important part of the burden has been and is to conserve the health, as well as treat the sick of the many Afro-Americans that fate has cast upon our shores, and who have become an integral part of our body politic.

I think it is accepted as a proven fact by all students of ethnology that any hybrid is more susceptible to the inroads of disease than a pure and unadultered race. The Afro-Americans, in this connection, represent a hybrid of every varying shade, for few there are in whose veins course the unmixed blood of their African ancestors. We see them from the coal black, on upward in the Caucasian scale, until we find in every community negroes who could not be known as such by any outward appearance.

These people are with us to stay, and while some have attained positions of honor and trust, the majority belong to the laboring class. They till our fields, they cook our food, they launder our clothes, they nurse our babies, they serve in our hotels, they shave our faces, they drive our automobiles, and perform multitudinous tasks of physical toil. Furthermore, they are our friends, and, as such, are entitled to consideration. This study is, therefore, submitted in their interest, being based upon more than thirty years of active practice in the South, the first seventeen years in an agricultural section, where the industrial potentialities of these people caused their landlords and employers to exhibit an active concern in all that pertained to health. The later conclusions have been built upon observations gained in a special clinic, where the negroes formed probably 90 per cent of the clinical material.

I might say also that these conclusions apply only to quadroons and those of darker hue; the octoroons and those of almost pure Caucasian blood naturally partaking of the physical and mental characteristics of the

whites, modified to a degree by education and environment.

The following are the approximate differences:

Cathartics: Probably in this class of agents lies the greatest difference. For instance, where two compound cathartic pills or twenty drops of fluid extract of cascara would produce free purgation in the Caucasian, this has to be increased about 50 per cent in the negro. Those practitioners who have had much experience with this race know full well that an ordinary laxative produces no intestinal peristalsis whatever.

Emetics: The same rule as cathartics applies, where the emetic is taken in the stomach. When, however, emesis is to be brought about by action on the vomiting center, as by hypodermic injection of apomorphin, about 25 per cent less than the accustomed dose will answer.

Anodynes: I have observed that, while the negro easily gives way to pain, indulging in vociferous lamentations upon sometimes slight provocation, relief may be procured by about 30 per cent less anodyne drugs than are demanded by the Caucasian. I have often abated apparently severe colics by hypos. of 1-8 to 1-6 of morphine, while this amount in the white race, as is well known, is inadequate except to "take the edge off" the pain.

Nerve Sedatives and Hypnotics: To these this race responds especially well. I have seldom found it necessary to administer the bromides in greater than 5-grain doses, and 10 grains of trional or 5 grains of veronal generally suffice in the infrequent cases of insomnia. "Tired Nature's sweet restorer" is a boon rarely denied these worry-free people, and "the ravelled sleave of care" is knit up with but little trouble.

Antipyretics: In these I have found no special differences between the races, though the aching pains accompanying fevers seem to be more quickly allayed by the coal-tar antipyretics, and cyanosis seldom supervenes. In these so-called "bilious attacks," where intense head- and backache were present, I have seen the pains promptly yield to 2-grain doses of acetanilid considerably before the fever appreciably varied. This may be taken as a corollary to what has been previously adduced concerning anodynes.

Cardiac Stimulants and Depressants: My observations to date have led me to give slightly larger doses (probably 10 per cent) of both to the negroes. This statement I desire to fortify by further study.

Diuretics and Diaphoretics: About the same will apply as to the classes above mentioned, only I speak with more assurance. Those who have set up satisfactory diuresis or diaphoresis in the negroes, especially the very black ones, will readily indorse my views.

Counterirritants: The epidermis of most Afro-Americans is rather thick, while the terminal sensory nerves do not appear to be normally impressionable, as a general rule. These agents, therefore, need to be used in considerable strength to produce satisfactory results. An active rubefacient that would make the average Caucasian deeply sympathize with the ancient Hebrew children in the fiery furnace, would hardly produce an audible grunt if put on the unresponsive surface of a son of Ham.

Stomachics and Digestants: It is concerning these agents, perhaps, that I have the most satisfactory data. It might be well to state in explanation that among the uneducated of both races it is customary to style as "stomach trouble" a disturbance located anywhere in the abdomen or pelvis. Among the men, aid is often sought for even a cystitis coupled with the self-made diagnosis of "stomach trouble," while among the female contingent most of the ovarian and uterine ills are referred to that long-suffering organ. For this reason, we have seen in our gastrointestinal clinic numerous negroes with supposed digestive disorders, where in reality the stomach was normal. As a test meal was taken in every instance, I am able to report on 128 cases, where the stomach was apparently not the offending portion of the anatomy, and am constrained to the belief that the normal free hydrochloric acid in the

Afro-American exceeds that in the Caucasian stomach by at least 6, probably 10 per cent. Acting on this assumption, I have given smaller doses of stomachics with good results; and, as the oxyntic cells seem slightly more active, I have found hydrochloric acid indicated in a correspondingly less proportion. The alkalies, however, are often required. Very sparing doses of these aids to digestion have generally sufficed for the gastric infirmities of our negro patients; in fact, I have many times earnestly wished that some of the prompt and satisfactory responses shown by these humble invalids could be as easily duplicated among those higher in the social and financial scale, those to whom surcease from digestive discomforts would mean bountiful emoluments to the medical attendant.

Psychotherapy among the Afro-Americans is almost like planting good seed in virgin soil. Where the blase Caucasian "from Missouri" greets the earnest efforts of the psychotherapist with a "show me" air, the negro "hears the tidings gladly," cooperates to the extent of his ability, reaping a quick and bounteous harvest. To the tyro in psychotherapy this race presents unlimited possibilities for profitable experience, and I assure my confreres who have not appealed to the emotions and the somewhat primitively-developed mentalities of these people in treating their ailments, that psychotherapy in addition to indicated medicinal measures will yield highly satisfactory effects.

The reader will, I trust, pardon the somewhat dogmatic tone of these statements; but as they represent conclusions not heretofore put in print, but which have been tried out to my satisfaction, I place them before the profession at their face value.

Should there be any doubting Thomases, who would cavil rather than investigate, I would remind them of Hamlet's words: "There are more things in heaven and earth, Horatio, than are dreampt of in your philosophy."

922 Candler Building.

PROPAGANDA FOR REFORM.

PINOLEUM.—A postcard advertising Pinoleum implies that Alexander Lambert, President of the American Medical Association, endorses this nostrum. Dr. Lambert has never used the Pinoleum products, and protests against the dishonest method of advertising them. Pinoleum has long been advertised to the public via the medical profession. Its life history is that of the typical nostrum. Epidemics are utilized as opportunities for pushing the product. As the Pinoleum Company now misuses the name of Dr. Lambert, so it made the false use of the name of Dr. George W. McCoy, of the U. S. Public Health Service. (*Jour. A. M. A.*, Nov. 1, 1919, p. 1380.)

OLIVE OIL AS A LAXATIVE.—In order that digestible oils may act as laxatives, it is necessary to give more than can be digested and absorbed. In the case of an infant, this may be one or more teaspoonfuls daily, beginning with small dosages and increasing them until the desired effect is obtained. For adults, one or two tablespoonfuls may have to be given three times daily, either an hour before meals or two hours after meals. Olive oil may be taken mixed with hot milk or floating in fruit juice. Olive oil might be particularly serviceable in spastic constipation in an emaciated individual. The use of olive oil as a laxative would be contraindicated in obesity, diabetes, gastric atony and in hypochlorhydria, as well as in those inclined to biliousness. (*Jour. A. M. A.*, Nov. 8, 1919, p. 1441.)

SOME MORE MISBRANDED NOSTRUMS.—The following preparations have been found to be misbranded under the Federal Food and Drug Act: Fruitatives, sold under the false claims that the laxative properties were due to the fruit extract; Tubbs' Bilious Man's Friend, a water-alcohol solution of sugar and plant extractives (rhubarb) with a very small amount of aromatics; Deerfield Water, consisting in part of a filthy, decomposed and putrid animal and vegetable substances; Mederine, a water-alcohol solution of sugar,

potassium iodide, methyl salicylate, salicylic acid, glycerin and laxative plant extractives, and Robinson Spring Water, falsely claimed to be effective in Bright's disease, diabetes, gout, rheumatism, indigestion, etc. (*Jour. A. M. A.*, Nov. 8, 1919, p.1458.)

PHYLACOGENS.—A circular letter devoted to singing the praises of "Pneumonia Phylacogen" contains this: "Pneumonia Phylacogen has been found to be a dependable means of preventing and treating pneumonic complications of influenza. In one large city it became a routine measure to give all persons affected with influenza an injection of Pneumonia Phylacogen as a prophylactic of pneumonia. The results were remarkable. Not only did the cases improve rapidly but in a majority of them the pneumonia did not occur." The injection of Phylacogens is simply the administration of a mixture of the filtered products of several bacterial species. The results that follow represent the reaction of the bacterial proteins—a reaction for good or evil. There is no scientific evidence to show that they possess any specific prophylactic virtue. To recommend their use in patients with influenza, as a prophylactic against pneumonia, is unwarranted; and the physician who acts on the advice of the manufacturer must assume the responsibility of the results. In case of mishap, he cannot fall back on the manufacturer. He will find no scientific evidence to support him. (*Jour. A. M. A.*, Nov. 15, 1919, p. 1442.)

ACRIFLAVINE AND PROFLAVINE. — Tentative descriptions and standards for acriflavine and proflavine are published in New and Nonofficial Remedies for the information of manufacturers, pharmacists and physicians. In view of numerous inquiries regarding the therapeutic properties of these dyes which have been received by the Council on Pharmacy and Chemistry, the Council has prepared an abstract of the available literature on the subject. From this review, it is evident that the use of the dyes is in the experimental stage and that their value cannot be definitely judged. Of the thirty-four reports which are abstracted, twenty-five may be considered as favorable; seven are distinctly unfavorable and two are in the doubtful class. (*Jour. A. M. A.*, Nov. 15, 1919, p. 1542.)

COTARNIN SALTS (STYPTICIN AND STYPTOL). — The Council on Pharmacy and Chemistry announces the omission of cotarnin salts (Stypticin and Styptol) from New and Nonofficial Remedies. Salts of the base cotarnin have been used as local and systemic hemostatics. The hydrochloride was first introduced as "Stypticin" and is now in the pharmacopoeia as cotarnin hydrochloride. The phthallic acid salt of cotarnin—cotarnin phthallate—was introduced as "Styptol." In 1918, Stypticin was omitted from New and Nonofficial Remedies because the former American agents were no longer offering it for sale. Styptol was retained and is described in N. N. R., 1919. As was pointed out in the description (N. N. R., 1919), the evidence for the usefulness of the cotarnin salts has been contradictory and unsatisfactory. Now P. J. Hanzlik has made a thorough investigation of the efficiency of hemostatics and has shown the inefficiency of cotarnin salts. The evidence was so definite that the Council has directed the omission of the general article on cotarnin salts and the description of Styptol from New and Nonofficial Remedies. (*Jour. A. M. A.*, Nov. 22, 1919, p. 1628.)

MEDINAL.—Medinal is a proprietary name applied to barbital sodium (sodium diethylbarbiturate), the sodium salt of barbital (diethylbarbituric acid, first introduced as veronal). The Council on Pharmacy and Chemistry reports that Medinal was omitted from New and Nonofficial Remedies in 1916 because the advertising issued by Schering and Glatz (who then acted as agents for the Berman manufacturer) contained misleading and unwarranted therapeutic claims. The Council further reports that Medinal, said to be manufactured in the United States, is now marketed by Schering and Glatz, Inc., but that the claims which are made for it are still unwarranted and prevent the acceptance of it for New and Unofficial Remedies. (*Jour. A. M. A.*, Nov. 15, 1919, p. 1542.)

THE ELI PRODUCTS OF ELI H. DUNN.—Physicians are receiving advertising matter from a concern that seems to operate under various names, such as "E. H. Dunn and Co.," "Eli H. Dunn," "Eli Laboratory," etc. The concern is located in Kansas City, Mo. It advertises "Eli 66 Capsules," "Eli Vaginal Capsules," "Eli 'Vim' Restorative," and an intravenous nostrum, "Ampules Eli Venhydrarsen." "Dunn's Intravenous and Restorative Treatment" is advised for the treatment of hysteria, and a price to the patient of three hundred dollars is suggested. The gross commercialism that permeates the advertising again illustrates the fact that the fad for intravenous medication offers an attractive field for those who would exploit our profession. (*Jour. A. M. A.*, Nov. 22, 1919, p. 1628.)

LAVORIS. — In recent years, Lavoris has been widely advertised as "The Ideal Oral Antispetic," particularly to the dental profession. In 1913, a card was sent out according to which each pint of Lavoris contained zinc chloride, 1.040; resorcin, 0.520; menthol, 0.400; saccharin, 0.195; formalin, 0.195; cl. cassia zeyl., 0.780; cl. caryophyl, 0.195. Advertisements now appearing repeat the "formula," except that resorcin is omitted. The formula is indefinite and misleading in that no denomination of weight is given for the various constituents. Analysis in the A. M. A. Chemical Laboratory demonstrated that the Lavoris now sold contains no resorcin and that the zinc content is equivalent to 0.1 gm. per 100 c.c. (about ½ grain to the ounce). As the analysis shows that the "formula" is not only meaningless because no denomination of weight is given, but that the zinc content is inaccurate for any denomination which might be assumed, the Council on Pharmacy and Chemistry declares the composition of Lavoris essentially secret. The Council also reports that Lavoris is advertised to the public indirectly with claims that are unwarranted and objectionable from the standpoint of public safety. Further, the Council reports that the name is objectionable in that it does not indicate the composition or potent ingredients of the mixture and that the composition is irrational in that the user is likely to ascribe a false and exaggerated value to it. (*Jour. A. M. A.*, Nov. 1, 1919, p. 1380.)

MICAJAH'S WAFERS AND MICAJAH'S SUPPOSITORIES.—The Council on Pharmacy and Chemistry reports that "Micajah's Medicated Wafers" (formerly called "Micajah's Medicated Uterine Wafers") and "Micajah's Suppositories," sold by Micajah and Co., Warren, Pa., are inadmissible to New and Nonofficial Remedies because: (1) their composition is essentially secret; (2) the name of neither of these mixtures is indicative of its composition; (3) of unwarranted and exaggerated therapeutic claims, and (4) the therapeutic advice which accompanies the trade packages constitutes an indirect advertisement to the public. The "wafers" were analyzed in the A. M. A. Chemical Laboratory in 1910 and found to consist essentially of dried ("burnt") alum, boric acid and borax. The suppositories were recently examined in the A. M. A. Chemical Laboratory and, like the "wafers," were found to contain alum, boric acid and borax —and these substances practically alone—incorporated in cocoa butter. The company claims that "to these have been added ammonii ichthyosulphonate, balsam of Peru, ext. balladonnae." The A. M. A. chemists report, however, that if extract of belladonna is present at all, it is in amounts too small to be detected by the methods commonly employed in the chemical examination of alkaloidal drugs.

The chemists report further that while ammonium ichthyosulphonate and balsam of Peru both have a decided odor and a dark color, the suppositories have but little color, and the odor of cocoa butter which forms their base is not covered by these drugs. Obviously, therefore, if ammonium ichthyosulphonate and balsam of Peru are present at all, the amounts are utterly insufficient to exert any therapeutic effect. (*Jour. A. M. A.*, Nov. 29, 1919, p. 1715.)

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PHYSICIANS AND STATISTICS.

While there have always been those who have cast discredit on the scientific value of statistics, it remains a fact that some medical knowledge must be derived from statistical investigation. Statistics may, of course, be juggled, and it is also fair to assume that statistics are often prepared by persons not skilled in the fundamental principles underlying their preparation. It is probably true that the bulk of medical statistics of the past has been prepared by medical men not trained as expert statisticians.

Recently Mr. Raymond Pearl,[1] professor of biometry and vital statistics in the Johns Hopkins School of Public Health, has analyzed, from the point of view of a trained statistician, certain figures in a paper published by Head[2] concerning the efficiency of various methods of treatment in pneumonia. In this paper Dr. Head himself suggested that the lowered mortality shown in favor of closed ward treatment might be merely a coincidence. In his analysis of the figures, Pearl shows that while Head's conclusions are qualitatively correct, they are quantitatively out of the way on account of the neglect to take into account the factor of random sampling. Another neglected factor, frequently overlooked by medical writers, is the natural history of the disease under investigation. It has been asserted by numerous observers that the mortality from influenzal pneumonia at the end of an epidemic is usually much lower than it is at the beginning of the outbreak. Pearl shows that this is the case, and that Head, although recognizing the possibility, did not take it into account in evaluating his figures.

If the statistical method, first extensively introduced into clinical medicine by Louis and the French school, is of value, it goes without saying that the statistics which are used must be based on the well-recognized principles utilized by professional statisticians. So far as mortality statistics are concerned, it may be assumed that the correct methods are usually employed; but it is cer-

tain that this is not the case when ordinary clinical statistics are concerned. In any textbook on medicine or surgery, one may find numerous statements covering statistically such matters as the age at which certain diseases occur, the relative proportion of the sexes involved, the frequency of complications, and the relative frequency of different diseases in a given organ or system. It is quite certain from the figures presented that these statistics would be regarded as valueless by a professional statistician, and that while they are perhaps not valueless to the clinician, they are not nearly as valuable or as correct as properly prepared statistics would be. In differential diagnosis, as Southard has pointed out, it is desirable that the physician should know the possibilities. In 10,000 patients with convulsions, what proportion is likely to be due to epilepsy; what proportion to uremia; what proportion to general paresis, etc.? With correct knowledge on such a point, the physician knows when he encounters a case of convulsions that there are certain chances in favor of a given disease, and he can make what Southard calls a diagnosis by orderly exclusion, which is more satisfactory than the old-fashioned diagnosis by exclusion in which the probabilities were ignored. In the matter of treatment, too, the application of correct statistical principles would prevent the flooding of medical periodicals with the views of therapeutic optimists based on uncontrolled observations. The checking of medical statistics by trained statisticians will doubtless serve as a stimulus to more accurate statistical methods.—*Jour. A. M. A.*

1. Pearl, Raymond: A Statistical Discussion of the Relative Efficacy of Different Methods of Treating Pneumonia, Arch. Int. Med. 24: 398 (Oct.) 1919.
2. Head, G. D.: The Treatment of Pneumonia, J. A. M. A. 72: 1268 (May 3) 1919.

THE COMPLEXITY AND COST OF MODERN DIAGNOSIS.

It has frequently been stated that scientific medical diagnosis and treatment are a privilege accorded only to the very poor and the very rich. The recent establishment of diagnostic clinics and diagnostic institutes indicates that the principle of group practice is being recognized to a greater extent than has heretofore been the case. The general hospitals have for many years been diagnostic institutes for group practice, a fact which is sometimes not remembered by those who proclaim that group practice represents a new principle. The diagnostic institute of the present day is, however, not a hospital but an ambulatory clinic, the idea being that many patients who do not care to go to hospitals and who do not need to do so can have their ailments studied at such an institution. A perusal of the charges for service made by some of these institutions indicates that while they have doubtless solved the problem of medical cooperation they have not completely solved the financial problems of the patient. The fee for a general examination is a modest one well within the reach of the average citizen who falls into neither the pauper class nor the group of the wealthy. More complicated examinations, such as are necessary in patients with obscure diseases, cost a sum which in many instances would be quite beyond the means of the average wage-earner. The question of obtaining efficient medical diagnosis and treatment for cases of obscure disease among those who can pay only a modest fee is one of the live questions of the day. It is doubtful whether it can be met by diagnostic clinics unless they are heavily subsidized organizations along the lines of the existing dispensaries, but differing from them in the fact that a small fee is charged. Attempts have been made to meet the situation in this way, but as yet there has been no widespread effort to care for the man of moderate means. As individuals of this group furnish the great bulk of patients, some machinery must be devised which will enable them to receive inexpensive but adequate care when they develop obscure diseases.—*Jour. A. M. A.*

HOSPITALS FOR CONTAGIOUS DISEASES.

The general attitude toward hospitals for contagious diseases seems to be undergoing a gradual evolution. We are getting away from the idea that such hospitals are "pest houses" and "necessary evils," whose chief function is to serve as a place of confinement for persons who might endanger the public. We are coming to look on them more as places where sick persons may secure needed care, which would not be possible in their homes, as is the case with noncontagious medical and surgical cases in a general hospital. Usually conditions that make impossible proper isolation at home also preclude suitable medical and nursing care there. Hospitals for contagious diseases are specially designed for those with very limited means and for those living in hotels, boarding and rooming houses. The value of hospitals as a means of eradicating contagious diseases through isolation has made a strong appeal to sanitarians everywhere. However, experience in England and in this country has led such authorities as Newsholme, Chapin and others to conclude that the hospitalization of persons with contagious diseases has failed to reduce their incidence materially. Chapin[1] says:

"Hospitals are useful for protecting the family, for checking outbreaks in institutions, for receiving cases from lodging houses and hotels, for furnishing better medical service, and for relieving the overworked housewife in the families of the poor. It is an unnecessary expense to provide hospital accommodations for all cases of scarlet fever and diphtheria, or for 90 per cent or even 80 per cent. That half or two thirds of the cases of these diseases can, for all practical purposes, be equally well cared for at home, is not unlikely."

In a hospital for contagious diseases, an occasional instance of crossed infection will occur even though every human effort is made to avoid it. This will be always one reason for home isolation and treatment, whenever they can be carried out satisfactorily.

In view of these facts, the statement of Stokes[2] in his interesting discussion of the organization and methods of contagious disease services, that a hospital for contagious diseases is, like the police, a necessary evil whose principal justification is the convenience and safety of the well public, is only partly true. The ancient idea that a hospital for contagious disease is a "pest house" and a source of danger to those living near it has largely influenced the location of such institutions in a community. Abundant experience has shown that the same considerations should determine a convenient and central location for a hospital for contagious diseases as for any hospital for acute illness. An intimate connection with a general hospital is economical from an administrative and operative standpoint, and except when the contagious disease hospital is very large, it may properly be located in one building of a general hospital group. Such a location enables the patients in emergencies and complications to benefit by the services of specialists, and has a tendency to raise the level of the character of the medical work in the hospital. In contrast to this, a hospital for contagious diseases that is situated in an isolated place, near the edge of a large city, operates under very serious disadvantages, both from an economic and a scientific standpoint. Hospitals for contagious diseases were formerly constructed on the same principles as general hospitals, and were often brought into disrepute by the frequency with which a patient entering with one disease contracted others in the institution.

Richardson[3] recently presented an able discussion of the construction of modern isolation hospitals. In efforts to combat mixed infections, the barrier and cubicle systems were introduced and are useful in old buildings with large rooms, but should not find a place in a building newly constructed at this time. The ideal hospital for contagious diseases consists of small rooms that accommodate single patients. This is

insisted on by those who, like Richardson[3] and Wilson,[4] have had practical experience in hospitals for these diseases. The initial cost of providing toilet and bath tub for each room is more than offset by the advantage from the use of baths in treating patients and by the saving in work required of nurses and attendants. Each room should be supplied with a lavatory with mixed hot and cold water controlled by the foot. The liberal provision of windows and the introduction of glass into partitions prevents a building constructed in this manner from being unduly dark. With single rooms, cross infections can be practically eliminated, and diseases of various sorts can be cared for at the same time in varying proportion. All the space becomes available at all times. As with general hospitals, so those for contagious diseases should serve as training places for physicians and nurses. The medical graduate and the nurse are not fully prepared for the practice of their professions if they have had no practical experience in the treatment of contagious diseases. The contagious diseases furnish the medical student with as great a variety of medical experiences as do those of a general hospital. Without a careful training in contagious diseases, a nurse is not qualified for institutional or public health work and her field of activities is necessarily limited. Pupil nurses should receive this part of their training toward the end of their course, after they are familiar with aseptic technic. No pupil who is careless in her work should be allowed to continue. Before a person enters on this work, diseased tonsils should be removed; serious organic disease of any kind would naturally exclude any person from the work. By immunizing those who are susceptible to diphtheria, as determined by the Schick test, and by the use of gauze masks, rubber gloves and aseptic methods, the danger of contracting the diseases with which the nurses are associated is largely eliminated. To repeat: It is important that the profession and the laity should appreciate that the hospital for contagious diseases is not a nuisance but an institution of real service; that it furnishes innumerable problems for solution by the research worker, and that its clinical material should be utilized for the instruction of medical students and nurses so that patients suffering with contagious diseases among the people may receive prompt and efficient medical and nursing care, at the same time that effective measures may be instituted for protecting the well from infection.—*Jour. A. M. A.*

1. Chapin: Sources and Modes of Infection, 1910.
2. Stokes, J. H.: Pennsylvania M. J. 12:729 (Aug.) 1919.
3. Richardson, D. L.: Mod. Hosp. 13: 108, 1919.
4. Wilson: Pub. Health Bull., 1918, No. 95.

THE OAT AS HUMAN FOOD.

The sentiment once expressed in the English dictum that oats are food for horses in England and for men in Scotland has persisted in many quarters until the present day. The necessities of war time, coupled with the strongly supported exhortations of the U. S. Food Administration, induced thousands of persons to accept the common cereal grains as of similar values, so far as their nutrient virtues are concerned. But peace time is at hand once more, and the barriers built by the national needs of 1917-1918 are being let down. Old time preferences and prejudices are likely to return to their previous prominence, except so far as the newer lessons have produced a satisfaction with the enforced changes.

Wheat is already rapidly regaining its pristine favor. What will happen to the temporary enhanced popularity of the other cereals remains to be ascertained. In the choice between corn, rice and oats, none of which are preferable bread grains, geographic and racial traditions will doubtless continue to dictate the decision, as they have done so long in the past. We have already called attention to Sherman's[1] demonstration of the excellent utilization and nutritive efficiency of maize (corn meal) when its protein is supplemented with about 10 per cent of the nitrogenous components of milk. In collab-

oration with Winters and Phillips,[2] he has prepared a comparable report on the oat proteins. The severity of the test is indicated by the fact that the food consisted essentially of oatmeal cooked with starch in thin, hard "scones" and eaten with apple and sugar, with and without milk. When the diet contained 100 c.c. (3 1-3 fluidounces) of milk a day, a daily intake of protein amounting to even less than 0.6 gm. per kilogram of body weight sufficed to maintain a nitrogen balance. Without the supplementary virtue of the milk this record could not be attained.

However, as these investigators conclude, in the maintenance metabolism of adults, as shown by the nitrogen balance experiments, the proteins of oats and maize are of virtually equal nutritive efficiency. This study by Sherman and his collaborators indicates that "for the purposes of practical dietetics, equal weights of oat and maize proteins may be regarded as essentially equal in value, and even the minimum amount of milk which can possibly be regarded as permissible, in the light of our present knowledge of nutrition, will apparently so supplement the proteins of either the maize or oat kernel as to make them function with an efficiency comparable with that of the average protein of mixed diet in the maintenance metabolism of man." No one will be so rash, at the present day, as to maintain that the cereals per se are perfect foods. Their shortcomings in respect to various nutrient virtues have repeatedly been rehearsed in *The Journal*. Nevertheless, the time has passed when we are justified in pointing to any of the commonly used cereals as nutritively obnoxious, as "heating" or as inherently detrimental to health. Science confirms what experience frankly teaches, that all these cereals have a useful place in the human dietary. Maize need not be relegated to the pig-pen, nor oats to the stable.—*Jour. A. M. A.*

1. Sherman, H. C., and Winters, J. C.: J. Biol. Chem. 35: 307, 1918. The Defense of Corn as a War Time Food, editorial, J. A. M. A. 71: 1138 (Oct. 5) 1918.

2. Sherman, H. C.; Winters, J. C., and Phillips, V.: Efficiency of Oat Protein in Adult Human Nutrition, J. Biol. Chem. 39: 53 (Aug.) 1919.

Cancer Department

"In the early treatment of cancer lies the hope of cure"
AMERICAN SOCIETY FOR THE CONTROL OF CANCER

"WHAT WE KNOW ABOUT CANCER."

The American Society for the Control of Cancer has been in existence and working effectively for a number of years. The sole object of the society, at present at least, is the "dissemination of facts in regard to cancer to the end that its mortality may be reduced by a wider knowledge of the disease."

The effort represented by the present pamphlet has perhaps the most far-reaching possibilities for good of any single attempt to lessen cancer mortality undertaken in this country.

It is no longer necessary to argue the point that delay is the one great factor in cancer mortality. At least four-fifths of cancer deaths could be prevented by early recognition. The conditions necessary for recognition of cancer in ample time for cure are not ideal but distinctly practicable. Public education is one important pathway of improvement, but education of the medical profession itself is of equal if not greater importance. Statistical studies have shown that in the majority of cases the doctor has had the cancer patient "under observation" over a year before efficient curative treatment is instituted. It is needless to state that during this year the majority of cases have changed from curable to incurable. As the pamphlet itself somewhat mildly puts it, "The conditions call for a far keener appreciation of responsibility for the mortality from cancer

than now generally exists in the medical profession."

It is not possible here to abstract this pamphlet which is already so condensed. The general facts concerning cancer are outlined and then each important type and site of cancer is taken up in detail and the forms, symptoms, standard treatment, and results to be expected are outlined for each type.

The chief point we would make here is that if every medical man would study and widespread dissemination of this pamphlet which he can read in an hour, the question of delay in cancer would be solved in so far as it is referable to the medical profession. The ultimate possible good obtainable from the widespread dissemination of this pamphlet is so great that we would urge every possible means to get it into the hands of as many medical men of all classes as possible. It can be had from the American Medical Association, 535 N. Dearborn Street, Chicago, for 10 cents. If you are a trained surgeon, get it. It will interest you. If you are further afield, get it and study and apply it. If you feel misgivings that some of your cases in the past might have been saved had you been more sure and acted more promptly (and who of us does not have such misgivings), get it. It will help you in future cases.

We would especially beg the assistance of Boards of Health, both state and municipal and of medical societies in distributing the pamphlet. It can be bought cheaper in quantities and sent out with your other mail matter with almost no extra cost or trouble. When such a simple means for such far-reaching good is in our hands it is a pity to let it lie neglected.

A MODERN MEAT-PACKING PLANT.

The latest thing in meat-packing plants, said to be the most modern establishment in the world, was opened by Armour and Company in South St. Paul, November 18th. Willard C. White, general manager, knocked the first bullock, and business at the new plant officially commenced.

Producers in a wide section of the Northwest expect to derive considerable advantage from this extension of their market facilities. The new plant will double the market capacity of the South St. Paul stockyards.

Situated in a fifty-acre site on the Mississippi River with the bluffs in the rear forming a picturesque background for the towering brick buildings, the twenty-two structures of the plant form an imposing exhibit. With its park-like grounds, its well-paved streets and its dignified architecture, the plant might be taken for a great industrial university.

Several millions of dollars has been expended upon this great meat factory. The buildings are of steel, reinforced with concrete and faced with brick, and are of the most modern, sanitary construction. All killing floors are finished in white enamel and all rooms where food products are manufactured, handled or stored are finished in enameled brick and impervious salt-glazed tile. Even the tables are of metal and where wooden cutting boards are used, provisions are made for their sterilization.

According to General Manager Willard C. White, the expenditures for livestock alone for this establishment will be from $75,000,000 to $90,000,000 a year.

The plant will have a daily killing capacity of 7,500 hogs, 750 cattle, 1,000 calves and 2,000 sheep. It will be a small city in itself with an army of employees, making a hive of industry of the towering buildings and miles of railroad track and acres of stock pens. In the beginning, 2,000 persons will be employed, but it is expected that before the end of the year business will have grown to such an extent that 3,000 will be needed. The annual payroll will range from $3,000,000 to $3,500,000 a year.

J. Ogden Armour has great faith in the future of this part of the Northwest as a stock-producing center. He believes that no part of North America offers greater opportunities for successful stock raising upon a large scale. Agricultural prosperity of the Northwest will be greatly enhanced as a

result of the increased stock production and inevitable rise in land values. Whenever a new packing plant has been established, land has appreciated. All contiguous territory benefits. The northwestern stock raisers through this plant will have direct connection with the fifteen other packing houses and 450 branch houses of Armour and Company, which are expected to do a business of over $1,000,000,000 this year.

It is predicted that the new plant, which will be the second in the Armour chain in its capacity for hog killing, will before long crowd the Chicago plant for first place.

Cattle, hogs, and sheep will be killed on the sixth floor of two connecting buildings. The killing floor is 127 feet wide and 337 feet long with galleries for visitors. The stock is conveyed to pens on the sixth floor of an adjoining building and three large elevators are used, each holding a carload of stock.

The total floor space, including all stories of the twenty-two buildings, is 1,457,664 square feet, or 33.34 acres.

The Administration or Service Building is a five-story structure 81x177 feet in area, of pressed brick and cut stone, situated just at the left of the main entrance. On the first floor is a large room devoted to the reception of visitors. Display cases line the walls filled with the products of Armour and Company. The employment bureau also is located on the first floor and has a large waiting room and other conveniences. The purchasing department, offices of the superintendent, master mechanic, paymasters, timekeepers, and other officials are conveniently situated. A large space has been devoted to the use of men and women government inspectors, including locker rooms.

The second story of the Administration Building is devoted to lockers, toilet rooms, and shower baths for the men. Similar accommodations for women and a rest room are found on the third floor, and on this floor is a room for physical examinations and emergency hospital operations. A cafeteria with a capacity of 400 persons occupies the space on the fourth floor, with a restaurant and cafeteria for office employees and a private dining-room in adjoining sections.

The general offices are situated on the fifth floor. Here also are to be found a telegraph room and a telephone room, a barber shop and another girls' rest room. There is plenty of space devoted to the general offices with a large skylight in the center. A smoking pavilion has been built on the roof. It is enclosed and has a promenade on one side.

As in all of the other plants of Armour and Company, considerable attention will be paid to welfare work among the employees of the South St. Paul plant. There will be physicians in attendance and employees will not only be treated for minor accidents but will be advised concerning their general health. There will be locker rooms and shower baths in various parts of the building.

Most of the department heads have been brought from other establishments of Armour and Company, but it is expected that the main body of employees will be recruited from the Twin Cities and vicinity.

NEW AND NONOFFICIAL REMEDIES.

ALBUTANNIN. — Tannin Albuminate Exsiccated. — A compound of tannin and albumin, thoroughly exsiccated and containing about 50 per cent of tannic acid in combination. It was first introduced as tannalbin. The use of albutannin is based on the assumption that the tannin compound passes the stomach largely unchanged and thus the astringent action will be exercised in the intestine where the compound will be decomposed by the intestinal fluid, slowly liberating the tannic acid. Albutannin is used in diarrhea, particularly in that of children, and in phthisis.

ALBUTANNIN-CALCO. — A nonproprietary brand complying with the standards for albutannin. The Calco Chemical Co., New York.

ALBUTANNIN-MERCK. — Merck and Co. have adopted the name albutannin for the

product accepted as tannin albuminate exsiccated-Merck (see Supplement to New and Nonofficial Remedies, 1919, p. 12). (*Jour. A. M. A.*, November 1, 1919, p. 1363.)

ACETANNIN.—TANNYL ACETATE.—The acetic acid ester of tannin. Acetannin was first introduced as tannigen. Acetannin is claimed to be practically nonirritant to the stomach and to pass unchanged into the intestine, there to become effective as an astringent. It is used in diarrheal affections.

ACETANNIN-CALCO.—A brand of acetannin complying with the standards of New and Nonofficial Remedies. The Calco Chemical Co., New York.

ANTIPNEUMOCOCCIC SERUM, COMBINED TYPES I, II AND III-GILLILAND.—Prepared by immunizing horses with dead and living pneumococci of the three fixed types and standardized against Type I culture. Marketed in 50 c.c. gravity injecting packages and also in 50 c.c. and 100 c.c. vial packages. The Gilliland Laboratories, Ambler, Pa. (*Jour. A. M. A.*, November 8, 1919, p. 1442.)

TABLETS CINCHOPHEN-ABBOTT, 7½ GRAINS.—Each tablet contains 7½ grains of cinchophen-Abbott. Cinchophen was first introduced as atophan and is in the U. S. Pharmacopeia as *Acidum phenylcinchoninicum*. The Abbott Laboratories, Chicago.

ACRIFLAVINE AND PROFLAVINE.—These are dyes derived from acridine, a base found in coal tar. Their use in medicine is proposed on the claim that they have high antiseptic power, together with comparative freedom from toxic or irritant action and without inhibiting effect on the phagocytic action of leukocytes or on the healing process. They have been used as wound antiseptics, and acriflavine has also been proposed for the treatment of gonorrhea. The reports on the value of the two preparations are contradictory and conflicting. In the treatment of wounds, solutions of 1:1,000 in physiologic sodium chloride solution are commonly recommended. In gonorrhea, a strength of 1:1,000 in phyiologic sodium chloride solution is used for an injection into the urethra, and weaker solutions have been used for lavation.

ACRIFLAVINE.—This is 3:6 diamino acridine sulphate. For a discussion of the actions, uses and dosage, see above. Acriflavine is a brownish-red, odorless, crystalline powder, soluble in less than two parts of water and in alcohol, forming dark-red solutions which fluoresce on dilution. It is nearly insoluble in ether, chloroform, liquid petrolatum, fixed oils and volatile oils.

PROFLAVINE.—This is 3:6 diamino acridine sulphate. For a discussion of the actions, uses and dosage, see the preceding article, Acriflavine and Proflavine. Proflavine is a reddish-brown, crystalline powder. It is soluble in water and alcohol, forming brownish solutions which fluoresce on dilution. It is nearly insoluble in ether, chloroform, liquid petrolatum, fixed oils and volatile oils. (*Jour. A. M. A.*, Nov. 8, 1919, p. 1443.)

PITUITARY SOLUTION-HOLLISTER-WILSON.—LIQUOR HYPOPHYSIS.—A sterilized solution of the water-soluble extract of the posterior portion of pituitary glands of cattle, preserved by the addition of chlorbutanol. It is standardized according to the method of Roth and complies with the U. S. P. standard. The Hollister-Wilson Laboratories, Chicago.

AMPOULES PITUITARY SOLUTION-HOLLISTER-WILSON 1 cc.—Each ampoule contains pituitary solution-Hollister-Wilson 1 c.c. (*Jour. A. M. A.*, Nov. 29, 1919, p. 1699.)

TANNIN ALBUMINATE EXSICCATED-MERCK TABLETS, 5 GRAINS.—Each tablet contains 5 grains tannin albuminate exsiccated, Merck. Merck and Company, New York (*Jour. A. M. A.*, March 1, 1919, p. 653).

TETANUS ANTITOXIN—FOR HUMAN USE: PURIFIED, CONCENTRATED (GLOBULIN).—A concentrated tetanus antitoxin (see New and Nonofficial Remedies, 1919, p. 266), marketed in syringes containing 1,500 and 5,000 units; in ampules containing 10,000 units, with apparatus for injection. Eli Lilly and Co., Indianapolis, Ind. (*Jour. A. M. A.*, Aug. 30, 1919, p. 691.)

PUBLISHER'S NOTES.

DISCRIMINATION IN SELECTING FOODS.

Every thoughtful housewife has long since learned the advisibility of purchasing only standard goods of established merit.

She knows, for instance, that all advertised food products of national distribution must of necessity conform to pure food laws, not only those of her own State, but also must be in conformity with the Federal Food Laws.

In short, the label required by pure food laws has prevented fraudulent substitution and the use of unwholesome material, due to the fact that the intelligent American housewife reads the label.

Unfortunately, however, there are some food products now on the market in various sections of the country to which our protective labeling laws have not sufficiently applied, and in such cases the housewife is naturally left in the dark. Take for instance, so-called Self-Rising Flours; there are no laws requiring the label on these flours to name the ingredients. These are still bought blindly with little knowledge of the ingredients, for the reason that these mixtures seem never to have been subjected to the same label requirements as other mixed food products. One is unable to determine from the label of any sack or package of Self-Rising Flour what the quality of the flour is.

However, the housewife can easily become thoroughly informed about most products and, by a process of careful selection of such products, safeguard health and make pure food legislation effective.

CAN DIPHTHERIA MORTALITY BE REDUCED?

Despite the fact that diphtheria antitoxin is practically a specific, one out of ten cases of diphtheria terminates in death.

Why this high death rate?

Two reasons: Tardiness in the use of diphtheria antitoxin, and the employment of too small doses. The average dose of diphtheria antitoxin at the present time is 5000 units. Authorities maintain that it should be 10,000 units.

Physicians who get the best results from diphtheria antitoxin use large doses early in the course of the disease. They administer initial injections of ten to twenty thousand units in all suspected cases. There is little danger from over-dosage of antitoxin. This fact is generally conceded. The real danger lies in the employment of too small doses.

Biological manufacturers are turning out serum of higher potency than formerly Newer methods of refinement and concentration have resulted in a better product. The antitoxin produced by Parke, Davis & Company at the present time is three to five times as concentrated as the antitoxin supplied several years ago. Physicians readily recognize the advantages of Parke, Davis & Company's refined and concentrated high-potency diphtheria antitoxin. There is less serum to inject, absorption is more prompt, and the results are quicker and better.

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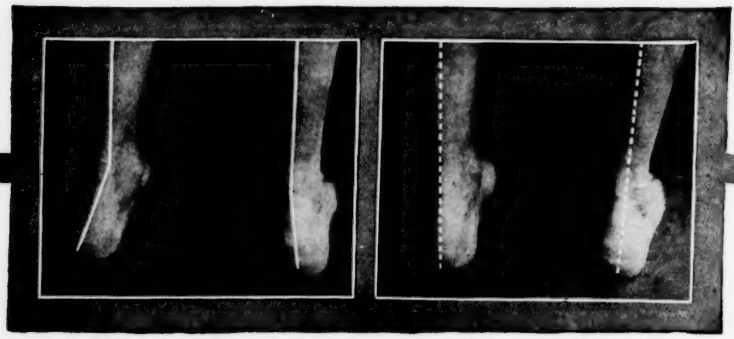
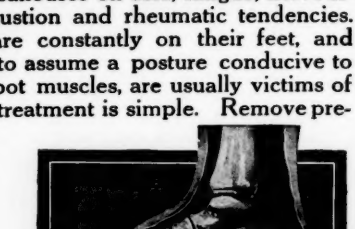


Weak Arch and Flat-foot—

that need mechanical correction are very prevalent and frequently are associated with painful heel, callouses on sole, fatigue, nervousness, neurasthenia, physical exhaustion and rheumatic tendencies. Heavy people and those who are constantly on their feet, and whose occupation requires them to assume a posture conducive to the weakening of the leg and foot muscles, are usually victims of these complaints. The corrective treatment is simple. Remove predisposing causes such as short hosiery, improperly fitted or constructed shoes, and have patient fitted to



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